BY ORDER OF THE COMMANDER 445TH AIRLIFT WING

445TH AIRLIFT WING INSTRUCTION 21-106

31 AUGUST 2011

Maintenance

FOREIGN OBJECT DAMAGE (FOD)
PREVENTION PROGRAM



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This instruction implements the Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*. This instruction extends the guidance of Air Force Instruction (AFI) 21-101, *Aerospace and Equipment Maintenance Management*. It establishes the Foreign Object Damage (FOD) Prevention Program and prescribes the standard procedures to be used to aid in controlling and preventing FOD to aircraft and support equipment. It is applicable to all personnel assigned to the 445th Airlift Wing (AW). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force Information Management Tool (AF IMT) 847, *Recommendation for Change of Publication;* route AF IMTs 847 from the field through the appropriate functional's chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records,* and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at https://afrims.amc.af.mil/.

SUMMARY OF CHANGES

This publication is updated to reflect changes in guidance and procedures dealing with the C5 and C17 aircraft. The changes include an update on FOD procedures and current dates on AFI's..

1. Responsibilities.

1.1. The 445^{th} Airlift Wing Vice Commander (CV) is assigned the responsibilities of the FOD Prevention Program Manager.

- 1.2. The 445th Maintenance Group Quality Assurance Jet Engine Inspector will be assigned the responsibilities of the wing FOD Monitor. The wing FOD Monitor will be the primary point of contact for the wing (FOD) committee.
 - 1.2.1. The wing FOD Monitor will:
 - 1.2.1.1. Perform duties in accordance with (IAW) AFI 21-101 and AFI 21-101, Air Force Reserve Command (AFRC) Sup 1, *Aerospace Equipment Maintenance Management*.
 - 1.2.1.2. Maintain squadron FOD monitor appointment letters on file.
 - 1.2.1.3. Report completed FOD investigation reports to AFRC/A4M and 4AF/A4M on AFRC Form 42, Foreign Object Damage (FOD) Mishap Investigation Check Sheet, within 30 days.
 - 1.2.1.4. Conduct quarterly wing FOD prevention meetings.
 - 1.2.1.5. Coordinate with all appropriate supervision upon any FOD-related incidents.
 - 1.2.1.6. Attend base FOD prevention committee meetings and provide FOD incidents on a monthly basis to the base FOD monitor. Ensure all FOD incidents that require reporting IAW AFI 91-204, *Safety Investigations and Reports*, are reported to the 445 AW Safety Office.
 - 1.2.1.7. Perform weekly spot checks of selected areas, using AF Form 2519, *All Purpose Checklist*, (Attachment 2) to document areas inspected. Completed checklist will be filed in the Quality Assurance (QA) Office.
- 1.3. The Squadron Commanders will appoint FOD monitors, primary and alternates, for each squadron.
 - 1.3.1. Squadron FOD monitors will:
 - 1.3.1.1. Attend quarterly wing FOD committee meetings.
 - 1.3.1.2. Assist in conducting FOD incident investigations as requested by the wing FOD monitor.
 - 1.3.1.3. Ensure that AF Form 2519, *All Purpose Checklist*, (Attachment 2) is used when performing Squadron FOD inspections.

2. Procedures.

- 2.1. Weekly FOD walks will be conducted on Wednesdays, alternating between day shift and swing shift, for ramp and hangar areas. Day shift start time will be at 0730 hours (during winter months at first safe light). Swing shift start time will be at the discretion of the AMXS swing shift Flight Chief or designee. The FOD walk schedule will be posted in the Monthly Flying Maintenance Plan.
 - 2.1.1. FOD walk area will be in accordance with the diagram in Attachment 3.
- 2.2. The Aircraft Maintenance Squadron (AMXS) Maintenance Superintendent or designee will:
 - 2.2.1. Coordinate the parking ramp and taxiway FOD walks.

- 2.3. Maintenance Group, Squadron Commanders or their designees will:
 - 2.3.1. Provide personnel for flight line FOD walk and assign personnel for hangar FOD walk, as required.
 - 2.3.2. Ensure hangars are cleaned at least weekly.
 - 2.3.3. Vehicle tires will be inspected at the Entry Control Point (ECP) prior to entering taxiways and aircraft parking areas.
 - 2.3.4. FOD mats/inlet protectors and pocket-less coveralls will be used during maintenance and/or inspections in the engine inlet. All C-5 FOD mats/inlet protectors when installed will be documented as a RED "X" discrepancy in the Air Force Technical Order (AFTO) Form 781A's and will have a "Remove Before Flight" streamer attached with a cord, so as to be visible from the ground when installed. On C-17 aircraft, the installation of the engine inlet cushioning pad (P/N 17G230018-1) or the engine anti rotation wedge (P/N PWA89502) does not require AFTO Form 781A documentation. All pockets must be emptied and any jewelry and/or watches removed before putting on the pocket-less coveralls, which will be the outer most layer of clothing.
 - 2.3.5. When maintenance personnel perform preparation for flight duties removing pitot covers, panel integrity, etc., they will ensure the flight deck is clean of all maintenance debris and foreign objects.
 - 2.3.6. All personnel working on or servicing the aircraft, engine, Aircraft Generation Equipment (AGE), munitions, loading and unloading of cargo, or components in an industrial maintenance area will ensure all loose items of clothing (scarves, baseball caps, etc), are accounted for. Hairpieces, metal hair fasteners, earrings or jewelry are not authorized for wear while performing these tasks.

3. Incident Reporting.

- 3.1. When suspected or confirmed FOD is discovered, the Production Superintendent or designated representative will make the aircraft available for immediate investigation and will ensure the Maintenance Operations Center (MOC) is immediately notified of all FOD incidents.
 - 3.1.1. MOC will notify all parties IAW MOC Check Sheet 3-15, FOD Damage/Bird Strike, immediately.
- 3.2. The wing FOD monitor will conduct, or appoint as required, a FOD incident investigator to ensure all FOD incidents are investigated and reported.
- 3.3. The FOD incident investigator will prepare the FOD report and forward this form to 445 Maintenance Group Commander (MXG/CC), Quality Assurance, and the wing FOD monitor within five working days after completion of the investigation.

4. Training Requirements.

4.1. All personnel will receive FOD Awareness Training upon initial assignment by the supervisor. Work center supervisors will ensure that each individual receives the necessary training and briefing to ensure they are made aware of the importance and understanding of FOD detection and pick-up. Review the FOD Booklet and FOD Training Film that is

available through Maintenance Group Training Office (MXOT) and other informational data that is available.

4.2. Quality Assurance may, when deemed necessary, provide wing-wide training to ensure an effective FOD Prevention Program is maintained.

STEPHEN D. GOEMAN, Col, USAFR Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 21-1, Air and Space Maintenance, 25 Feb 2003

AFMAN 33-363, Management of Records,01 Mar 2008

AFI 21-101, Aircraft Equipment Maintenance Management, 26 July 2010

AFI 21-101/AFRC Sup 1, Aerospace Equipment Maintenance Management, 13 January 2011

AFI 91-204, Safety Investigations and Reports, 24 SEP 2008

T.O. 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures, 1 Sep 2010

Adopted Forms

AF IMT 847, Recommendation for Change of Publication

AFRC Form 42, Foreign Object Damage (FOD) Mishap Investigation Check Sheet

AF Form 2519, All Purpose Checklist

AFTO Form 718A, Maintenance Discrepancy and Work Document